

City of Knoxville, Tennessee Stormwater Engineering Division www.cityofknoxville.org/engineering/ Land Development Manual February 2002

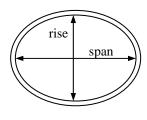
## Policy 04 DRAINAGE EASEMENTS

This policy specifies the drainage easement widths for drainage pipes with diameter (or span) up to 60 inches. The Stormwater Engineering Division may require different drainage widths based upon engineering judgment to allow for unusual circumstances or field conditions. For most small-diameter pipes, the depth from the top of ground to the pipe invert is usually less than 6 feet anywhere along the length of culvert. For pipe sizes that are 24" or less, the minimum easement width shall be 10 feet.

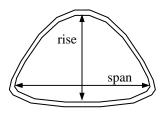
Larger drainage pipes or deeper trenching depths will be reviewed by the Stormwater Engineering Division. In some cases where a trenching box can be used, a drainage easement 20 feet wide is generally adequate. Sandy soils, steep slopes and difficult access approaches will require wider drainage easements.

Pipe Size (diameter or span)	Typical Width of Stormwater Drainage Easement  (based on maximum depth from top of ground to pipe invert)		
	Less than 6 feet	From 6' to 12'	More than 12 feet
15" to 24"	10 feet	20 feet	30 feet
27" to 48"	15 feet	20 feet	30 feet
54" to 60"	20 feet	20 feet	30 feet

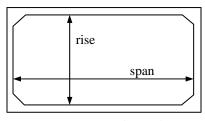
For pipe types which are not circular, the span shall be used to determine minimum easement widths rather than the diameter. The span, defined to be the maximum inside width of a pipe or culvert, shall be used to define drainage easement widths for noncircular shapes.



Elliptical pipe



Arch pipe



Precast concrete box culvert